

Title (en)

METHOD FOR PRODUCING HYDROPHILIC POLYMER RESIN

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES POLYMEREN HYDROPHILEN HARZES

Title (fr)

PROCEDE POUR PRODUIRE UNE RESINE HYDROPHILE POLYMERÉE

Publication

EP 0819721 A1 19980121 (EN)

Application

EP 97901796 A 19970131

Priority

- JP 9700229 W 19970131
- JP 1789496 A 19960202
- JP 2555296 A 19960213

Abstract (en)

A hydrophilic polymer is denatured with a gaseous denaturant or a powdery denaturant substance made from a liquid denaturant substance. The liquid denaturant substance is made into powders by, for example, a method of mixing the liquid denaturant substance with a water-insoluble compound, a method of cooling the liquid denaturant substance to or below its melting point to turn the same into a solid state. Consequently, the hydrophilic polymer can be denatured uniformly. In case that the hydrophilic polymer is denatured with a gaseous denaturant, the hydrophilic polymer and denaturant react with each other efficiently in a safe manner regardless of the size or shape of the hydrophilic polymer. In case that the hydrophilic polymer is denatured with the powdery denaturant substance, not only the liquid denaturant substance which is substantially in the solid state can be mixed with the hydrophilic polymer, but also the denaturation timing can be readily controlled. <IMAGE>

IPC 1-7

C08J 3/00; C08J 3/24

IPC 8 full level

C08J 3/20 (2006.01); **C08J 3/24** (2006.01)

CPC (source: EP US)

C08J 3/20 (2013.01 - EP US); **C08J 3/24** (2013.01 - EP US); **C08J 2300/14** (2013.01 - EP US)

Cited by

US6103785A; KR20140092112A; CN104507984A; US9109097B2; EP3085439A4; EP4252728A3; WO2015093594A1; KR20160102217A; US10646612B2; EP4252728A2; EP2835382A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

US 6150469 A 20001121; DE 69730084 D1 20040909; DE 69730084 T2 20050714; EP 0819721 A1 19980121; EP 0819721 A4 20001004; EP 0819721 B1 20040804; US 6476155 B1 20021105; WO 9728209 A1 19970807

DOCDB simple family (application)

US 93027297 A 19970929; DE 69730084 T 19970131; EP 97901796 A 19970131; JP 9700229 W 19970131; US 63453200 A 20000808